

Nick presented an AGS injection lattices with ν_x around 8.3 and ν_y around 9.1. He used same compensation quads setting as the model for current AGS tune setting. The β_{max} is around 40meters, similar to the current case and dispersion function also behaves reasonably well.

Thomas presented his simple model for horizontal intrinsic resonances in mathcad format. With 15π normalized 95% horizontal emittance, 80% input polarization and a 15% cold snake(plus a 5.9% warm snake), the final polarization at C15 polarimeter should be about 64%. This is the measurement with target centered in the beam profile. A profile measurement (with target moving cross the beam) would be lower for a Gaussian beam: about 53%. All these polarization losses are due to horizontal intrinsic resonances. The discussion went on for how to overcome the coupling when put horizontal tune close to integer. The coupling is likely stronger since fraction of both tunes are closer. There are two sources of coupling. One is from orbit motion in all quads, which can be corrected with global decoupling. One is from the local coupling at snakes. This local one usually is small, especially at higher energies.

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